

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 - 26. (Canceled)

1 27. (Currently amended): An electronic device comprising a semiconductor
2 device provided with pads and a substrate provided with pads on which said semiconductor
3 device is mounted, said pads of said semiconductor device being bonded to said pads of said
4 substrate through junctions each including Cu balls comprising substantially of Cu, said Cu balls
5 formed by one or a mixture of an elemental Cu, a Cu alloy, and a Cu-containing compound, and
6 by a Cu-Sn compound containing Cu_6Sn_5 , said Cu balls being bonded to each other by said
7 Cu_6Sn_5 .

1 28. (Previously presented): An electronic device according to claim 27,
2 wherein said Cu-Sn compound further includes Cu_3Sn .

1 29. (Previously presented): An electronic device according to claim 28,
2 wherein said Cu_3Sn is disposed in a region between said Cu-balls and said Cu_6Sn_5 .

1 30. (Previously presented): An electronic device according to claim 27,
2 wherein said Cu_6Sn_5 has a thickness of about a few micrometers.

1 31. (Previously presented): An electronic device according to claim 27,
2 wherein said Cu_6Sn_5 is formed by reflowing said Cu-balls and Sn-base solder at a temperature
3 higher than a melting point of said Sn-base solder and lower than a melting point of said Cu-
4 balls.

1 32. (Previously presented): An electronic device according to claim 31,
2 wherein said Sn-base solder comprises eutectic Sn-Cu solder, eutectic Sn-Cu solder to which at

3 least one of In, Zn and Bi is added, eutectic Sn-Ag solder, eutectic Sn-Ag solder to which at least
4 one of In, Zn and Bi is added, eutectic Sn-Ag-Cu solder, or eutectic Sn-Ag-Cu solder to which at
5 least one of In, Zn and Bi is added.

1 33. (Previously presented): An electronic device according to claim 31,
2 wherein said Cu-balls have a diameter greater than 5 micrometers.

1 34. (Currently amended): An electronic device comprising a semiconductor
2 device provided with pads and a substrate provided with pads on which said semiconductor
3 device is mounted, said pads of said semiconductor device being bonded to said pads of said
4 substrate by way of junctions, each junction including Cu balls comprising substantially one or a
5 mixture of elemental Cu, a Cu alloy, and a Cu compound, said Cu balls further comprising a Cu-
6 Sn compound containing Cu_6Sn_5 and Cu_3Sn , said Cu_3Sn being formed at peripheries of said Cu
7 balls.

1 35. (Previously presented): An electronic device according to claim 34,
2 wherein said Cu-Sn compound is formed by reflowing said Cu-balls and Sn-base solder at a
3 temperature higher than a melting point of said Sn-base solder and lower than a melting point of
4 said Cu-balls.

1 36. (Previously presented): An electronic device according to claim 35,
2 wherein said Sn-base solder comprises eutectic Sn-Cu solder, eutectic Sn-Cu solder to which In,
3 Zn or Bi is added, eutectic Sn-Ag solder, eutectic Sn-Ag solder to which In, Zn or Bi is added,
4 eutectic Sn-Ag-Cu solder or eutectic Sn-Ag-Cu solder to which In, Zn or Bi is added.

1 37. (Previously presented): An electronic device according to claim 35,
2 wherein said Cu-balls have a diameter greater than 5 micrometers.